

CLAIMS

1. A configurable H-bridge circuit, comprising:
  - a high switch connected to a voltage source;
  - a low switch connected to ground;
  - a first configuration of the high switch and the low switch; and
  - a second configuration in which the high switch and the low switch are each configured as a discrete switch that can be coupled as a component switch, the second configuration being different than the first configuration.
2. A configurable H-bridge circuit as recited in claim 1, wherein the first configuration includes the high switch and the low switch connected together and coupled to drive a motor.
3. A configurable H-bridge circuit as recited in claim 1, further comprising:
  - a second high switch connected to the voltage source;
  - a second low switch connected to ground; and
  - wherein the first configuration includes the high switch and the low switch connected together and coupled to drive a motor, and the second high switch and the second low switch are connected together and coupled to drive the motor.

4. An application-specific integrated circuit (ASIC), comprising:  
a configurable H-bridge circuit that includes a first configuration as a motor drive circuit to drive a motor, and includes a second configuration as discrete switches that can each be coupled as a component switch; and  
a configuration register configured to maintain an indicator of the configurable H-bridge circuit configuration.

5. An ASIC as recited in claim 4, wherein the configuration register maintains the indicator that the configurable H-bridge circuit is configured as the discrete switches.

6. An ASIC as recited in claim 4, wherein the configuration register is further configured to maintain a switch indicator that indicates a configuration of a discrete switch.

7. An ASIC as recited in claim 4, wherein:  
the configurable H-bridge circuit includes a high switch connected to a voltage source, and includes a low switch connected to ground; and  
in the first configuration as a motor drive circuit, the high switch and the low switch are configured to be connected together and coupled to drive the motor.

8. An ASIC as recited in claim 4, further comprising at least a second H-bridge circuit configured to drive a second motor.

9. An ASIC as recited in claim 4, further comprising:

a second H-bridge circuit configured as a first motor drive circuit;

a third H-bridge circuit implemented as a second motor drive circuit;

and

wherein the second H-bridge circuit is configured to drive the motor and the third H-bridge circuit is configured to drive a second motor in an event that the configurable H-bridge circuit is configured as the discrete switches.

10. A printing device, comprising:

a first motor configured for movable control of at least a first component in the printing device;

a second motor configured for movable control of at least a second component in the printing device;

a multiple H-bridge circuit including:

a first H-bridge circuit configured to drive the first motor;

a second H-bridge circuit configured to drive the second motor;

and

a third H-bridge circuit that includes a first configuration as a motor drive circuit to drive a third motor, and includes a second configuration as discrete switches that can each be coupled as a component switch.

11. A printing device as recited in claim 10, further comprising a configuration register configured to maintain an indicator of the third H-bridge circuit configuration.

12. A printing device as recited in claim 10, further comprising a configuration register configured to maintain an indicator that the third H-bridge circuit is configured as the discrete switches.

13. A printing device as recited in claim 10, further comprising a configuration register configured to maintain an indicator that the third H-bridge circuit is configured as the discrete switches, the configuration register further configured to maintain a switch indicator that indicates a configuration of a discrete switch.

14. A printing device as recited in claim 10, wherein the third H-bridge circuit includes a high switch connected to a voltage source and includes a low switch connected to ground, and wherein the first configuration includes the high switch and the low switch connected together and coupled to drive the third motor.

15. A printing device as recited in claim 10, wherein the third H-bridge circuit includes a high switch connected to a voltage source and includes a switch connected to ground, and wherein the second configuration includes at least one of the high switch and the low switch coupled as the component switch.

16. A printing device as recited in claim 10, further comprising an application-specific integrated circuit (ASIC) that includes the multiple H-bridge circuit, the ASIC further including a configuration register configured to maintain an indicator of the third H-bridge circuit configuration.

17. A method, comprising:

writing an indicator to a configuration register to indicate an implementation of a configurable H-bridge circuit;

coupling the configurable H-bridge circuit to drive a motor in an event that the configurable H-bridge circuit is implemented as a motor drive circuit; and

coupling a switch of the configurable H-bridge circuit as a component switch in an event that the configurable H-bridge circuit is implemented as discrete switches.

18. A method as recited in claim 17, further comprising maintaining the indicator of the implementation of the configurable H-bridge circuit, wherein the indicator indicates at least one of a first configuration of the configurable H-bridge circuit as the motor drive circuit and a second configuration of the configurable H-bridge circuit as the discrete switches.

19. A method as recited in claim 17, further comprising writing a switch indicator to the configuration register to indicate a configuration of the component switch.

20. A method as recited in claim 17, wherein coupling the configurable H-bridge circuit to drive the motor includes:

connecting an output of a high switch of the configurable H-bridge circuit to an input of a low switch of the configurable H-bridge circuit, the high switch connected to a voltage source and the low switch connected to ground; and

coupling the high switch and the low switch to the motor.

21. A method as recited in claim 17, further comprising configuring an H-bridge circuit control according to the indicator in the configuration register to couple the configurable H-bridge circuit to drive the motor in an event that the H-bridge circuit is implemented as the motor drive circuit.

22. A method as recited in claim 17, further comprising configuring an H-bridge circuit control according to the indicator in the configuration register to couple a switch of the configurable H-bridge circuit to a switched component in an event that the H-bridge circuit is implemented as the discrete switches.

23. A method, comprising:

controlling a first movable component in a printing device with a first motor driven by a first H-bridge circuit of a multiple H-bridge circuit;

controlling a second movable component in the printing device with a second motor driven by a second H-bridge circuit of the multiple H-bridge circuit;

configuring a third H-bridge circuit of the multiple H-bridge circuit in a first configuration to drive a third motor in an event that the third H-bridge circuit is to be implemented as a motor drive circuit; and

configuring the third H-bridge circuit in a second configuration as discrete switches in an event that a switch of the third H-bridge circuit is to be implemented as a component switch.

24. A method as recited in claim 23, further comprising coupling the third H-bridge circuit to drive the third motor in the first configuration.

25. A method as recited in claim 23, further comprising coupling the switch of the third H-bridge circuit to a component in the second configuration.

26. A method as recited in claim 23, further comprising writing an indicator to a configuration register to indicate a configuration of the third H-bridge circuit.

27. A method as recited in claim 23, further comprising:

writing an indicator to a configuration register to indicate a configuration of the third H-bridge circuit; and

coupling the third H-bridge circuit to drive the third motor in the first configuration according to the indicator maintained in the configuration register.

28. A method as recited in claim 23, further comprising:

writing an indicator to a configuration register to indicate a configuration of the third H-bridge circuit; and

coupling the switch of the third H-bridge circuit to a component in the second configuration according to the indicator maintained in the configuration register.

29. One or more computer-readable media comprising computer executable instructions that, when executed, direct a printing device to:

write an indicator to a configuration register to indicate a configuration of a configurable H-bridge circuit;

configure the configurable H-bridge circuit in a first configuration to drive a motor in an event that the configurable H-bridge circuit is to be implemented as a motor drive circuit; and

configure the configurable H-bridge circuit in a second configuration as discrete switches in an event that a switch of the configurable H-bridge circuit is to be implemented as a component switch.



30. One or more computer-readable media as recited in claim 29, further comprising computer executable instructions that, when executed, direct the printing device to:

couple an output of a high switch of the configurable H-bridge circuit to an input of a low switch of the configurable H-bridge circuit, the high switch connected to a voltage source and the low switch connected to ground; and

couple the high switch and the low switch to the motor in the first configuration that the configurable H-bridge circuit is implemented as the motor drive circuit.

31. A printing device, comprising:

means to drive a first motor to control a first movable component in a printing device;

means to drive a second motor to control a second movable component in the printing device;

means to configure a configurable H-bridge circuit in a first configuration as a motor drive circuit to drive a third motor; and

means to configure the configurable H-bridge circuit in a second configuration as discrete switches.

32. A printing device as recited in claim 31, wherein:

the means to drive the first motor is a second H-bridge circuit of a multiple H-bridge circuit that includes the configurable H-bridge circuit; and

the means to drive the second motor is a third H-bridge circuit of the multiple H-bridge circuit.

33. A printing device as recited in claim 31, further comprising means to couple the configurable H-bridge circuit to drive the third motor.

34. A printing device as recited in claim 31, further comprising means to couple a switch of the configurable H-bridge circuit as a component switch.